

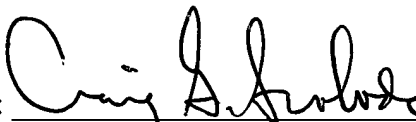
REMARKS

The above amendments correct various typographical errors present in the specification and do not represent new matter. Entry is respectfully requested.

On February 20, 2001, the Patent Office mailed a Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures. In accordance with the requirements of 37 CFR Sections 1.821-1.825, Applicants are providing herewith a substitute paper copy of the Sequence Listing, along with a computer readable form of the Sequence Listing. The sequence disclosures in the Sequence Listing are fully supported by the specification as filed, and as such, do not introduce new matter. Entry of the substitute Sequence Listing into the present specification is respectfully requested.

The Examiner is invited to contact the undersigned at (650) 225-1489 in order to expedite the resolution of any remaining issues.

Respectfully submitted,
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PATENT TRADEMARK OFFICE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

The specification has been amended to add a paper copy of the Sequence Listing which includes 11 pages and provides sequences identified as SEQ ID NOS: 1-11.

The paragraph at page 1, lines 8-11 has been amended as follows:

The present invention relates generally to molecules involved in the Hedgehog (Hh) signaling pathways that are ~~pertinant~~ pertinent for cell growth and differentiation. Additionally, the invention relates to identification and isolation of novel DNA having homology to DNA encoding human suppressor of fused (~~"hSU(fu)"~~) "hSu(fu)", and to the recombinant production of novel polypeptides, designated herein as hSu(fu) and alternatively as hSu(fu).

The paragraph at page 3, lines 23-25 has been amended as follows:

A cDNA clone (DNA33455) (SEQ ID NO:1) has been identified that encodes a novel polypeptide designated "hSu(fu)" or PRO1280. In one embodiment, the invention provides an isolated nucleic acid molecule comprising a nucleic acid sequence encoding a hSu(fu) polypeptide.

The paragraphs at page 7 line 33 to line 38 have been amended as follows:

Figure 9 presents a 346 bp nucleotide sequence of an EST human brain cDNA sequence identified as an NT2 neuronal precursor 937230 cDNA (GenBank Accession No. AA223637) (SEQ ID NO:63), with similarity to a Suppressor of ~~fused~~ Fused gene. EST was provided by Hillier, et al. via The Washington University-HHMI Mouse EST Project.

Figure 10 shows an amino acid sequence a hSu(fu) epitope flag protein (SEQ ID NO:109).

Figure 11 shows an amino acid sequence hSu(fu)-GST protein (SEQ ID NO:1110).

The paragraph at page 39, lines 25-31 have been amended as follows:

PCR primers (forward and reverse) were synthesized:

forward PCR primer 5'-CAGCCGAACCCGCTCCAGGTAC-3' (SEQ ID NO:76)

reverse PCR primer 5'-CATGGACTCTGTTGTCACCATAGAG-3' (SEQ ID NO:87)

Additionally, a human fetal lung pRK5 mammalian expression library was screened with a synthetic oligonucleotide hybridization probe that was constructed from the consensus DNA33454 sequence which had the following nucleotide sequence:

—hybridization probe

5'-GAGCACTGGCACTACATCAGCTTTGGCCTGAGTGATCTCT-3' (SEQ ID NO: 9 8)